Reconsidering Division Cavalry Squadrons

A Monograph

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Abstract

Reconsidering Division Cavalry Squadrons, by MAJ Nathan A. Jennings, US Army, 46 pages.

In 2004 the US Army eliminated its division cavalry squadrons in favor of standardized brigade combat team modularity. Now, when executing offensive, defensive, or stability actions, division commanders must rely upon, and thus commit, subordinate maneuver brigades to conduct zone, route, and area reconnaissance tasks and screen, guard, and cover missions. Given the unlikelihood of recreating permanent division cavalry due to resource constraints, doctrinal solutions can provide creative options for providing forceful information collection capacity at the two-star level. By incorporating insights from the general history of division-level cavalry, a security operations case study in Vietnam, and a reconnaissance operations case study in the Persian Gulf, this study proposes a series of organizational templates for the purpose of temporarily detaching, training, and augmenting brigade cavalry squadrons to directly answer division commanders' information requirements. The resulting cavalry task force, when empowered as a direct reporting element with cross-domain capabilities, provides internally resourced, tactically effective, and readily available scouting capability to bridge tactical and operational efforts in unified land operations.

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Acronyms

ACR	Armored Cavalry Regiment
ACAV	Armored Cavalry Assault Vehicle
ABCT	Armored Brigade Combat Team
ADP	Army Doctrine Publication
ADRP	Army Doctrinal Reference Publication
AH	Attack Helicopter
ARVN	Army of the Republic of Vietnam
BCT	Brigade Combat Team
BDE	Brigade
BFSB	Battlefield Surveillance Brigade
CFV	Cavalry Fighting Vehicle
DIVCAV	Division Cavalry Squadron
ETO	Eastern Theater of Operations
FM	Field Manual
HMMWV	Highly Mobile Multi-Wheeled Vehicle
IBCT	Infantry Brigade Combat Team
LAV	Light Armored Vehicle
MACV	Military Assistance Command Vietnam
NVA	North Vietnamese Army
OH	Observation Helicopter
R&S	Reconnaissance and Surveillance
ROAD	Reorganization of Army Divisions
SBCT	Stryker Brigade Combat Team
VC	Viet Cong

Illustrations

Introduction

In 2004 the United States Army embraced brigade-centric modularity and began to divest its ability to conduct forceful reconnaissance and security at division and corps levels.[1] In a marked change from the cavalry structure it had predominantly employed since the Second World War, the institution decisively concentrated its capacity—in the form of mechanized, motorized, and aerial scouts—to fight for information and provide freedom of maneuver at lower tactical echelons. This reorganization eliminated the division cavalry squadrons (DIVCAV) and armored cavalry regiments (ACR) that had served the "eyes and ears" of two and three-star tactical commanders for over sixty years in favor of a larger quantity and diversity of squadrons assigned directly to brigade combat teams (BCT).[2]

Despite the benefits of modularity, the resulting transformation created capability gaps in the Army's ability to answer information requirements during joint operations. As argued by Lieutenant General H.R. McMaster, who commanded the 3rd ACR in Iraq in 2005, "trends in armed conflict that include all domains contested, increased lethality and range of weapons, complex and urban terrain, and degraded operations all argue for increasing importance of reconnaissance and security capabilities at all echelons."[3] This problem, which coincided with shifts in institutional focus to large-scale counterinsurgency campaigns in Southwest Asia, has become acute as adversary states design challenging area denial networks to dissuade forced entry operations.

Army divisions, in particular, have lost the ability to aggressively shape their maneuver with dedicated reconnaissance and security formations. When planning and executing diverse ranges of offensive, defensive, or stability actions in expeditionary theaters, two-star commanders must now rely upon, and thus commit, assigned brigades to conduct necessary zone, route, and area reconnaissance tasks

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[1] This study identifies specific echelons rather than generalizing an operational level of war; see Lawrence Freedman, *Strategy: A History* (Oxford: Oxford University Press, 2013), 202, 205, for description of the concept.

[2] Lee Quintas, "Commandant's Hatch: Cavalry Update," *Armor* (July-September 2014): 4; David Barno and Nora Bensahel, "The Future of the Army: Today, Tomorrow, and the Day after Tomorrow," Atlantic Council, Brent Scowcroft Center on International Security, September 2015, 11-12.

[3] H.R. McMaster, correspondence with author, 5 November 2016.

and screen, guard, and cover missions that DIVCAV previously performed.[4] As Lieutenant General

Stephen Twitty, who commanded the 1st Armored Division, reported to General Mark Milley, Chief of

Staff of the Army, after a Warfighting Assessment exercise in 2015, this "reliance on BCTs" has

challenged the division's ability to "shape the deep fight."[5]

      Given the unlikelihood of recreating permanent division cavalry due to resource constraints and

preferences for standardized modularity, the institution can explore more creative options for providing

higher-echelon reconnaissance and security capacity through doctrinal solutions. As an expedient option,

it should consider establishing a series of customized organizational templates for the purpose of

temporarily detaching, training, and enhancing BCT cavalry squadrons to specifically answer division or

joint task force commanders' information requirements. The resulting cavalry task force, when

empowered as a direct reporting element with cross-domain capabilities, offers the potential to provide

internally resourced, tactically effective, and readily available scouting capability at the two-star level.[6]

      Similar to the Army's emerging excursion concept where corps temporarily assign entire BCTs to

conduct reconnaissance and security, tailored cavalry task forces assembled from assets typically

controlled by a division would provide, as recommended by Twitty, the "reestablishment of Division-

level reconnaissance capability" with the "means to achieve an air-ground layered reconnaissance and

information plan necessary in today's complex operating environment."[7] Designing these templates could

range from enhancing a single squadron with graduated capabilities to reorganization of entire brigades.

Incorporating both historical insight and contemporary operational assessment, the cross-domain

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[4] Field Manual (FM) 3-98, *Reconnaissance and Security Operations* (Washington, DC: Government Printing Office, 1 July 2015), 5-6, 6-4.

[5] Stephen Twitty to Mark Milley, memorandum, 12 November 2015, 1st Armored Division, "1st Armored Division NIE/AWA Force Structure and Tactical Capabilities Observations."

[6] "Joint Cross-Domain Fires and Maneuver," White Paper, Army Capabilities Integration Center, TRADOC, 1 June 2016, 2, defines cross-domain fires and maneuver as "operations to exploit an opportunity from one or more domains."

[7] Stephen Twitty to Mark Milley, memorandum, 13 November 2015.

construction would balance lethality, operational reach, covertness, versatility, and integration of emerging technologies to create agile and versatile scouting formations.

As with most scholarly endeavors, researching and designing twenty-first century division cavalry starts with acknowledgement of relevant literature. The topic's historiography, which has enjoyed modest academic and professional attention since its inception, can be divided between generalized military studies that include mention of DIVCAV and more specific works that focus directly on it in experience, history, or future concept. If the former grouping provides broader context for how the squadrons enabled US Army efforts from 1941 to 2004, the latter contributes understanding of how doctrinal, material, and cultural matters informed organizational evolution between and during conflicts.

Beginning with generalized works, James Sawicki's *Cavalry Regiments of the US Army* and Robert Cameron's *To Fight or Not to Fight* describe the development of American mounted scouts in different contexts.[8] While Sawicki covers from the early 1800s to the Vietnam War, Cameron explores, in great detail, from initial mechanization to present. More episodic works, like Don Starry's *Mounted Forces in Vietnam* and Stephen Bourque's *Jayhawk: The VII Corps in the Persian Gulf War*, include the role of division cavalry in particular campaigns. Expansive unit histories, such as James Wheeler's *The Big Red One*, demonstrate how specific squadrons maintained enduring relationships with parent divisions over time.[9]

Veteran military officers have also published insightful memoirs about personal observations of DIVCAV at war. For example, retired Army colonel William Haponski describes his tour with the 1st Squadron, 4th Cavalry Regiment, in Vietnam in *Danger's Dragoons*, while veteran soldier Matthew

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[8] James Sawicki, *Cavalry Regiments of the U.S. Army* (Dumfries, VA: Wyvern Publications, 1985); James Cameron, *To Fight or Not to Fight* (Fort Leavenworth, KS: Combat Studies Institute Press, 2010).

[9] Donn Starry, *Mounted Combat in Vietnam* (Washington, DC: Department of the Army, 1978); Stephen Bourque, *Jayhawk: The VII Corps in the Persian Gulf War* (Washington, DC: Department of the Army, 2002); James Wheeler, *The Big Red One* (Lawrence: University of Kansas Press, 2007).

Brennan narrates the same for the 1st Squadron, 9th Cavalry Regiment, in *Flashing Sabers*.[10] The 1991

Persian Gulf War, though less canvassed, includes both Stephen Bourque and John Burdan's recollection

of 1-4 CAV's desert attack in *Road to Safwan* as well as Joseph Barto's account if its sister squadron's

maneuvers in *Task Force 2-4 CAV*.[11] These memoirs provide useful tactical descriptions of how

DIVCAVs facilitated their parent command's maneuver in diverse geographic settings.

Official US government documents likewise provide pertinent primary source information about

the history and employment of division cavalry. While after action reports by deployed units

contextualize actual combat employment—as opposed to perceived doctrinal utility and cultural value—

during a variety of combat operations from the Second World War to Operation Iraqi Freedom, more

expansive organizational assessments such as the US Army Armor Center's evaluation of armored forces

after the Vietnam War and the US Army Maneuver Center's more recent assessment of cavalry forces in

2014 provide broader institutional perspective. Army doctrinal publications and memorandums published

between and during conflicts likewise demonstrate how the intended role of divisional cavalries changed

according to evolving fiscal constraints and tactical demands.[12]

Perhaps the most analytical area of scholarship encompasses the plethora of professional articles

and degree-producing monographs that directly assessed division cavalry models at various stages of

development. Mostly published by the Army's Command and General Staff College, Army branch

journals, and security think-tanks during the late 1980s and early 1990s in response to Army of

Excellence and post-Gulf War organizational changes, they, and limited studies from civilian universities,

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[10] William Haponski, *Danger's Dragoons: The Armored Cavalry of the Big Red One in Vietnam, 1969* (Cantigny Park, IL: First Division Museum, 2014); Matthew Brennan, *Flashing Saber: Three Years in Vietnam* (North Charleston, SC: CreateSpace Publishing, 2015).

[11] Stephen Bourque and John Burdan, *The Road to Safwan: The 1st Squadron, 4th Cavalry in the 1991 Persian Gulf War* (Denton: University of North Texas Press, 2007); Joseph Barto, *Task Force 2-4 CAV-"First In, Last Out": The History of the 2nd Squadron, 4th Cavalry Regiment, During Operation Desert Storm* (Fort Leavenworth, KS: Combat Studies Institute Press, 1993).

[12] The Combined Arms Research Library at Fort Leavenworth, the Center of Military History at Fort McNair, and unit museums like the First Infantry Division Museum at Cantigny hold archived government documents relevant to division-level cavalry history.

provide specific analysis on organization, training, and employment. These productions, usually written by serving Army officers or security professionals with experiential knowledge, indicate how practitioners perceived DIVCAV strengths and deficiencies at specific times.[13] As with most discussions about mechanized warfare, the analysis often centered on the material and doctrinal integration of mobility, protection, and firepower with emerging technologies.

The dated nature of scholarship on division cavalry, especially when viewed against the Army's intensifying focus on near-peer adversaries in the wake of its large-scale counterinsurgency campaigns in Iraq and Afghanistan, has created new space for scholarly re-engagement. This study accordingly seeks to reconsider the subject within a twenty-first century paradigm while integrating historical insights. By offering a general history of DIVCAV, a security operations study from the Vietnam War, a reconnaissance operations study from the First Persian Gulf War, and finally, proposed capabilities for modern cavalry task forces, it offers initial solutions to mitigate existing capability gaps. This blend of historical and contemporary assessment aims, as described in ATP 3-91 *Division Operations*, to allow commanders to better "guide or orient the movement and maneuver of friendly forces."[14]

Division Cavalry Background

The long evolution of US Army division cavalry squadrons mirrored the conceptual tensions that shaped all American cavalry practices since initial mechanization. The first debate, which eventually led to their demise, centered on questions over where to concentrate mounted scouting formations in the echeloned order of battle. In a marked contrast with its current brigade-centric structure, the Army predominantly favored assignment of reconnaissance and security elements at division and corps levels

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[13] For an example professional paper see Robert Wilson, "Tanks in the Division Cavalry Squadron," in *ARMOR* (July-August 1992): 6-11; for an example academic monograph see Peter Kindsvattor, "The Army-of Excellence Divisional Cavalry Squadron—A Doctrinal Step Backward?" MMAS Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth, 1985.

[14] Army Techniques Publication (ATP) 3-91, *Division Operations* (Washington, DC: Government Printing Office, October 2014), 8-3.

from 1940 to 2004. While corps controlled cavalry groups—and later regiments—to enable their maneuver, divisions owned a variety of direct-reporting and dedicated "recce" squadrons according to mechanized, motorized, light, airmobile, and airborne profiles to accomplish the same.[15]

The second discussion that defined the evolution of division-level cavalry stemmed from changing opinions on how and why to arm and employ them. This unending debate resulted in seventy years of vacillation over optimal inclusion of wheeled and mechanized scouts, heavy armor, attack and scout aviation, indirect fires, and light infantry according to desired stealthy or forceful capabilities.[16] As early as 1942, Major General Charles Scott, who observed the British Eighth Army in North Africa on behalf of the US Army, noted that "reconnaissance must be organized to fight in execution of its mission, to fight for time to send information in, and to fight for time for the main body to properly utilize the information."[17] Army leaders would frequently ignore this prescription in favor of fiscal savings and greater strategic mobility over subsequent decades.

The Second World War exploded as the Army's formative experience in conducting both wheeled and tracked reconnaissance operations. By 1945 it deployed thirteen mechanized squadrons and two armored reconnaissance battalions to support heavy divisions and forty-two wheeled reconnaissance troops to support infantry divisions across Europe. Simultaneously, the institution created thirteen mechanized cavalry groups with two squadrons each to enable corps operations. While squadrons and groups possessed a mix of Willys jeeps, M8 Greyhound armored cars, M2 half-tracks, and M5 Stuart and M24 Chaffee light tanks, infantry division scouts mostly relied on dismounted soldiers, cars, and jeeps.

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[15] John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 105; Mary Lee Stubbs and Stanley Russel Connor, CMH Pub 60-1 *Armor-Cavalry, Part I: Regular Army and Army Reserve, Army Lineage Series* (Washington, DC: Government Printing Office, 1969), 73.

[16] Cameron, *To Fight or Not to Fight*, xv-xvi.

[17] Charles Scott, "Armored Reconnaissance," *Cavalry Journal* 6 (November-December 1942): 20.

The Pacific theater saw more limited cavalry employment while featuring residual horse-mounted actions like the 126th Cavalry Regiment's storied charge on the Bataan Peninsula in January of 1942.[18]
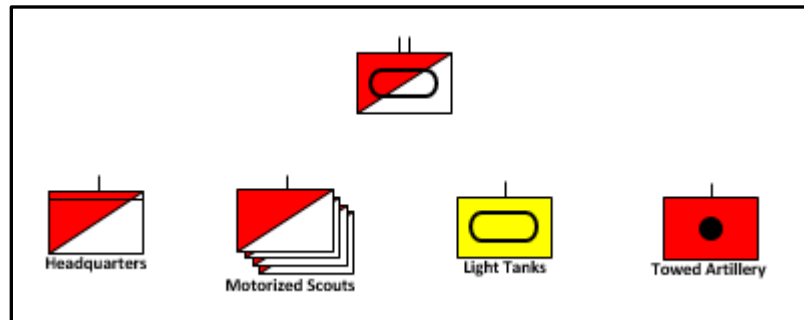

Figure 1. Mechanized Reconnaissance Squadron, WWII. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 105.

The performance of America's mechanized cavalry against German, and to a lesser extent, Japanese combined arms forces cemented its status as a distinctive sub-branch in its rapidly modernizing army while leaving questions about optimal employment. Studies 48 and 49 of the post-war European Theater of Operations (ETO) Board, which each assessed organization and tactics respectively, found that while division squadrons spent thirteen percent of their time on reconnaissance missions and twenty-four percent on security missions, they allocated sixty-three percent of its efforts to other combat tasks requiring greater lethality.[19] One squadron commander lamented that they had to "fight to obtain information in practically every case."[20] This reality contrasted sharply with wartime doctrine that predicted stealthy operations for mounted scouts.

The Army retained its tiered cavalry structure following the Second World War despite massive demobilization in 1948 and 1949. Based on the ETO Board's findings, it strengthened the few remaining squadrons and troops in the armored and infantry divisions—temporarily renamed battalions and

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[18] McGrath, *Scouts Out*, 98-99, 104-105, 107.

[19] Ibid., 106-107.

[20] Quoted in Cameron, *To Fight or Not to Fight*, 72.

companies—with wheeled scouts, light tanks, and mechanized infantry teams integrated at the platoon-level. This reorganization emerged under Pentomic transformation, which catalyzed a force-wide restructuring to allow dispersed survival on nuclear battlefields while allowing greater dismounted capacity for security operations and requiring less *ad hoc* augmentation during offensive maneuvers. The inclusion of tanks, though minimal, reflected intent to conduct aggressive reconnaissance, lethal counter-reconnaissance, and survivable guard missions against more numerous Soviet forces.[21]

Figure 2. Reconnaissance Battalion, Armored Division, Pentomic. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 148.

Division cavalry development did not occur in isolation of other echelons after the global war. While the Army initially reorganized its cavalry groups as constabularies in West Germany, it soon created the 2nd, 6th, and 14th ACRs (Light) to enable corps operations when tensions heightened with the Warsaw Pact. As described by historian and veteran US Army officer Stephen Bourque, these "combined arms organizations" were structured to "operate along wider frontages and at greater depths…reacting expeditiously to opportunities or crises, all in extended battle space." The initial three ACRs, and the 3rd and 11th regiments that followed, would gain in armament throughout the Cold War and achieve outsized success in Vietnam and the First Gulf War.[22]

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[21] McGrath, *Scouts Out*, 147-148.

[22] Stubbs, "Armor-Cavalry," 75, 77; Stephen Bourque, "The Hundred Hour Thunderbolt: Armor in the Gulf War," in *Camp Colt to Desert Storm: The History of U.S. Armored Forces*, ed. George Hofmann and Donn Starry (Lexington: The University Press of Kentucky, 1999), 511.

The Korean War from 1950 to 1953 severely tested US Army expeditionary reconnaissance limitations. With infantry-centric divisions providing most of the combat forces due to the restrictive terrain and a dearth of available heavy units in the theater, their light wheeled cavalry companies, rather than mechanized reconnaissance battalions, would learn hard lessons against a more numerous combined arms foe. Though scouts in the 7th Infantry and 1st Cavalry Divisions, in particular, provided critical security under trying conditions with aging WWII-era platforms, they suffered from poor training, inadequate firepower, over-tasking, and high attrition. However, their overall performance in difficult terrain prompted institutional interest in providing infantry divisions a full reconnaissance battalion.[23]

From 1962 to 1964 the Army revamped its divisions, and their associated cavalry formations, under a transformation program called Reorganization Objective Army Division (ROAD) to allow greater tactical and strategic flexibility. The modifications added Patton-series medium tanks and M1114 Armored Reconnaissance Vehicles, new information collection technologies, and most importantly, a large rotary wing troop to expand observation frontage. The new airmobile divisions received air-centric squadrons to support longer and faster movements while airborne divisions received light wheeled squadrons. A long-lasting administrative aspect of ROAD included re-aligning the dispersed cavalry units under historical regimental lineages.[24]

Figure 3. H-Series Division Cavalry Squadron, ROAD. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 153.

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[23] Cameron, *To Fight or Not to Fight*, 123.

[24] Stubbs, "Armor-Cavalry," 83-84.

The H-Series squadrons of the 1960s thus provided Army divisions with scouting formations that possessed a greater balance of mobility, protection, and firepower. As described by FM 17-35 *Armored Cavalry Units, Armored and Infantry Divisions* in 1957, the changes armed two-star commanders with a "closely integrated team of combined arms capable of conducting virtually any type of combat action."[25] While heavier armor allowed more aggressive reconnaissance, the air cavalry troop greatly expanded operational reach. Yet despite the advantages of organic close air support, higher commands frequently detached the rotary wing for separate purposes, thereby limiting squadron effectiveness.

The new ROAD squadrons' combat test came not on the plains of Europe against the Warsaw Pact forces they were designed to counter, but in the jungles of Vietnam against a more irregular opponent: the Viet Cong. Though the Chief of Staff of the Army, General Harold K. Johnson, initially professed the "limited usefulness" of cavalry armed with M48 Patton tanks and new M113 Armored Personnel Carriers in Indochina, the Army eventually deployed six cavalry squadrons and one cavalry regiment, in addition to ten mechanized infantry and three armor battalions, as the conflict intensified.[26] According to General Don Starry, who assessed the effectiveness of US mounted forces against the Viet Cong and North Vietnamese Army, armored cavalry "emerged as powerful, flexible, and essential battle forces" in both "close combat" and "pacification and security operations."[27]

Throughout the late 1970s and early 1980s, the Army again reorganized its combat divisions under the Division 86, and then Army of Excellence, initiatives designed to leverage fiscal, manpower, and logistical efficiencies across the force. While the changes mostly impacted infantry divisions, the heavy division squadrons, after some uncertainty, lost their tanks and reorganized their helicopters into two smaller air troops. They also moved from reporting directly to the division commander to inclusion

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[25] Field Manual (FM) 17-35, *Armored Cavalry Units, Armored and Infantry Divisions* (Washington, DC: Government Printing Office, 1957), 18.

[26] Quoted in Starry, *Mounted Combat in Vietnam*, 56.

[27] Ibid., vi.

within divisional aviation brigades. Despite their adoption of heavily armed and armored Bradley-variant M3 Cavalry Fighting Vehicles (CFV) beginning in 1981, J-Series squadrons were now equipped for only moderately contested information collection against peer adversaries.[28]
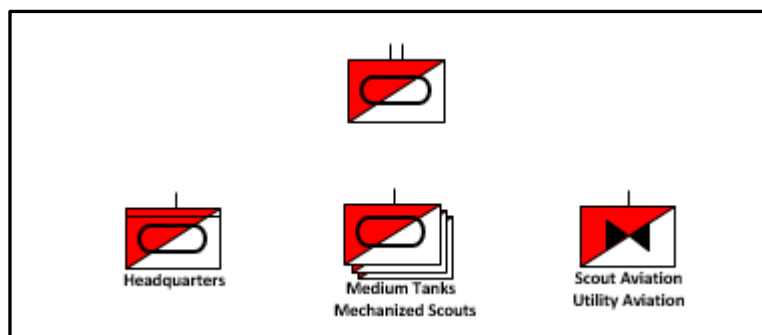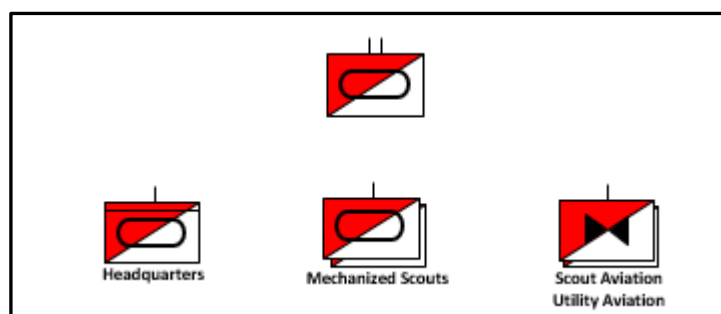

Figure 4. J-Series Division Cavalry Squadron, AoE. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 165.

Proponents of the J-Series argued that the squadrons' likely position behind larger cavalry regiments in the Army's doctrinal order of battle would compensate for less firepower while disincentivizing employment of scouts as assault troops. Though officers like Starry cautioned against misusing squadrons as maneuver battalions because they were "the central core of the reconnaissance team," other cavalry champions, like Major General Robert Wagner, countered that they needed "tanks for hard combat capability" and that "reconnaissance requires armor." Major General Thomas Tait, then Commandant of the Armor Center, agreed in *Armor* in 1987 when he aimed "to provide the squadron commander with a third ground cavalry troop" and "put the tanks back in the division cavalry."[29]

Even as American heavy cavalry lightened its profile, mounted scouts in the infantry divisions underwent similar alterations. In keeping with Army of Excellence prioritization of strategic mobility, the light squadrons adopted an air-centric profile with two air troops and a single ground troop equipped with

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[28] Kindsvattor, "The Army of Excellence Divisional Cavalry Squadron," 24.

[29] Starry, *Mounted Combat*, 221; Robert Wagner, "Division Cavalry: The Broken Saber," *Armor* (September-October 1989): 39; Thomas Tait, "Commander's Hatch: Reconnaissance: Remembering Some Lessons Learned," *Armor* (July-August 1987): 6-7.

unarmored High Mobility Multipurpose Wheeled Vehicles. Airborne divisions requiring deeper and faster reconnaissance received an additional aviation troop. The 82nd Airborne Infantry Division, as an anomaly, intermittently included air-droppable M551 Sheridan Armored Reconnaissance Airborne Assault Vehicles and wheeled Light Armored Vehicle-25s (LAV) throughout the 1980s and 1990s to allow modest anti-armor capability.[30]

The First Gulf War in 1991 provided the proving ground for Army of Excellence forces. Since the United States deployed several corps with armored, mechanized, light, and airborne divisions to defeat the entrenched Iraqi Army, the conflict featured a variety of DIVCAVs with varying compositions of ground and air troops. Several division commanders, anticipating an armored fight, augmented their heavy squadrons with M1A1 Abrams main battle tanks and additional AH1 Cobra and AH64 Apache attack helicopters to support M3 CFV ground scouts as "hunter-killer" teams. Throughout the short conflict these cavalries executed doctrinal zone reconnaissance and mobile screens as they led their parent commands through the 2nd and 3rd ACRs' forward lines to engage the Iraqi Republican Guard.[31]

The success of squadrons with augmented armor in Operation Desert Storm once again shifted the reconnaissance debate in favor of maximal fighting capability. US Army officer Joseph Barto, who served as executive officer of 2-4 CAV in the 24th Infantry Division (Mechanized) during the campaign, later attested that their "organic tank and cavalry fighting vehicle mix" perfectly fulfilled "the division commander's requirements—all the time and under all conditions."[32] Lieutenant General Frederick Franks, commander of VII Corps, likewise believed he "needed armored—read tanks—reconnaissance in

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[30] McGrath, *Scouts Out*, 166-167.

[31] Bourque, "The Hundred Hour Thunderbolt," 498.

[32] Barto, *Task Force 2-4 CAV*, 116.

the division cavalry squadron."[33] Soon after, the Army restructured division cavalry as L-Series types that

closely mirrored ACR squadrons with greater inclusion of heavy tanks and attack aviation.[34]

The American-led invasion of Iraq in 2003 featured the final combat action by US Army

division-level cavalry. The 3rd Squadron, 7th Cavalry Regiment, led the 3rd Infantry Division

(Mechanized) in a high tempo reconnaissance-in-force from Kuwait to Bagdad that validated the L-Series

pairing of M1 Abrams tanks and M3 CFVs. The air-centric squadrons of the 101st and 82nd Airborne

Divisions simultaneously provided security for infantry forces. However, as noted by historian John

McGrath in his 2008 work, *Scouts Out*, 3-7 CAV's relative overmatch as a combined arms team

"sometimes made it more valuable as an additional maneuver force than as a reconnaissance element."[35]

As before, disagreements over optimal cavalry employment would catalyze yet another transition.

Figure 5. L-Series Division Cavalry Squadron, 1995-2004. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 167.

Beginning in 2004, the Army adopted a modular design that transferred many tactical capabilities

from corps and divisions to BCTs. This transformation included, despite 3-7 CAV's recent performance,

the elimination of all division cavalry to allow expanded combined arms capability in each brigade. The

new BCT squadrons organized without organic tanks or aviation while including a dismounted infantry

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[33] Frederick Franks, Interview with Peter Kindsvatter, VII Corps TAC, Iraq, 2 April 1991, 121, Army Lessons Learned Information System.

[34] FM 17-95 *Cavalry Operations* (December 1996), 29-30.

[35] McGrath, *Scouts Out*, 177.

company in the light squadrons. The resulting predominant reliance on lightly protected M1114 HMMWV trucks and moderately protected M1127 Stryker Reconnaissance Vehicles, with only limited M3 CFV density in armored BCTs, once again optimized the cavalry force for stealthier observation. The reorganization of the final ACR in favor of three lightly armed and short-lived battlefield surveillance brigades (BFSB) in 2011 completed the demise of Army scouting organizations that had traditionally teamed scouts with tanks and aviation.[36]

As during previous transitions, the lightened cavalry force—which aimed to offset diminished organic lethality with new surveillance and target acquisitions technologies—came under withering criticism over the next decade as the Army prioritized counterinsurgency campaigns in the Middle East.[37] Then, in 2015 and 2016, as the institution refocused on nation-state competition in East Europe, East Asia, and Mesopotamia, it increased the cavalry's tactical flexibility in the armored BCTs by replacing HMMWVs with additional M3 CFVs and adding a tank company to each squadron. The stryker scouts likewise assumed ownership of the Mobile Gun System and anti-armor companies in their brigades. Colonel Matthew Van Wagenen, who commanded the 3rd Armored BCT, 1st Cavalry Division, predicted that the "enhanced reconnaissance structure" would likely "offset some of the losses in force structure."[38]

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[36] Barno, "Future of the Army," 11-12.

[37] For examples of criticism see Charles Bies, "Too Light to Fight: the Infantry Brigade Combat Team Cavalry Troop In Combined-Arms Maneuver," *Armor* (July-September 2014): 43-49; Kyle Trottier, "The Cavalry Squadron of 2025," *Armor* (January-March 2015): 67-71; Todd Poindexter, "Transforming Mechanized Reconnaissance: How The Armored Brigade Combat Team (ABCT) Cavalry Squadron Should Be Structured For Reconnaissance And Security Operations In The Near Future," MMAS Monograph, School of Advanced Military Studies, US Army Command and General Staff College, Fort Leavenworth, 2014.

[38] Leah Kilpatrick, "Cavalry Brigade Combat Team assumes new design, transition nearly complete," *Army News*, 17 February 2016.
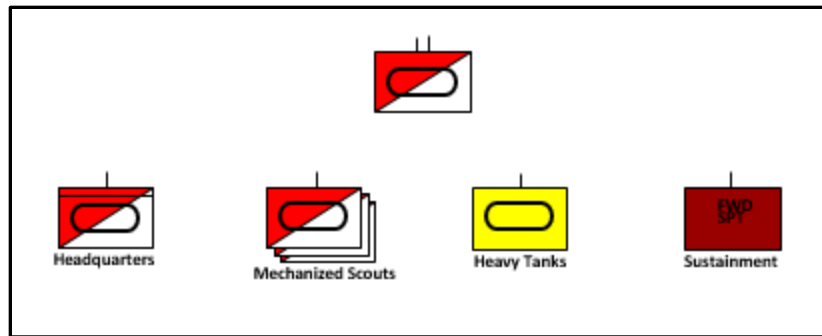
Figure 6. Cavalry Squadron, Armored BCT. Field Manual (FM) 3-20.97, *Cavalry Squadron* (Washington, DC: Government Printing Office, May 2016), 1-9.

These latest reorganizations illustrate the broader transitions that have defined the ever-changing form, identity, and purpose of American cavalry since mechanization. Since the Second World War, the Army's mechanized, wheeled, and aerial scouts have repeatedly vacillated between optimization for stealthy and forceful reconnaissance while often receiving *ad hoc* capabilities to negotiate emergent wartime challenges. After aligning its mounted reconnaissance assets at divisions and corps levels for over sixty years, the institution has, in the twenty-first century, decisively concentrated them at lower tactical echelons. This evolution has led to a structural inadequacy where divisions must commit subordinate brigades to fulfill their doctrinal imperative to "conduct reconnaissance and security operations in close contact with the enemy and civilian populations."[39]

Security Operations Case Study:

1-4 CAV in Vietnam

Cavalry forces specialize in security efforts designed to protect their higher headquarters' operations. This tactical task, along with reconnaissance, has endured as a primary function of mounted scouts due to their inherent operational reach. For divisions wielding a panoply of maneuver and enabling assets, the requirement for dedicated formations to safeguard and facilitate an increasingly complex order

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[39] FM 3-98*,* 1-7; "White Paper: Cavalry Squadron Capabilities Review," 4.

of battle remains a critical function in the twenty-first century. As outlined in *Division Operations*, such scouting elements "provide early and accurate warning" to "provide the force" with "time and maneuver space within which to react to the enemy, and to develop the situation."[40]

Typical security tasks, as defined by modern US Army doctrine, typically center on observing, reporting, and if need be, neutralizing enemy reconnaissance or blunting adversary incursions during offensive, defensive, and stability operations. They may include conducting screen, guard, and cover missions where arrayed units provide early warning and fight to allow time and space for higher headquarters to deploy main force battalions and brigades. These operations may also include distributed area security efforts to protect friendly forces and terrain within defined geographical boundaries. The DIVCAV formations, and the J and L-Series models in particular, usually accomplished these missions through integration of enhanced mobility, firepower, protection, and aerial reach.[41]

The combat performance of the 1st Squadron, 4th Cavalry Regiment, of the 1st Infantry Division in Vietnam offers an illustrative case study on the potential effectiveness of division-level cavalry during distributed security operations. From October of 1965 to April of 1970 the command, informally called "Quarterhorse," conducted diverse tasks that included route patrolling, static defense, pacification, and "search and destroy" missions against irregular, though highly lethal, Communist opponents. Since the Big Red One deployed as a predominantly light division, its cavalry squadron's compliment of armored personnel carriers, scout helicopters, and eventually, tanks, in addition to partnered infantry, heavy armor, and host nation forces, allowed them to provide critical and responsive combat power.[42]

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[40] ATP 3-91, 8-7.

[41] Army Doctrinal Reference Publication (ADRP) 3-90, *Offense and Defense* (Washington, DC: Government Printing Office, August 2012), 5-3.

[42] *History of the Fourth United States Cavalry: Prepared and Loyal* (Washington, DC: Government Printing Office, 1991), 27, 31; Haponski, *Danger's Dragoons*, 31.
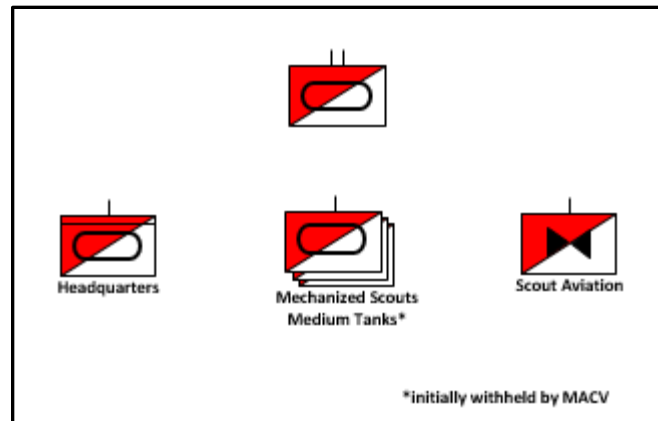
Figure 7. 1-4 CAV, Vietnam. John J. McGrath, *Scouts Out: The Development of Reconnaissance Units in Modern Armies* (Fort Leavenworth, KS: Combat Studies Institute Press, 2008), 153.

The Quarterhorse squadron deployed from Fort Riley, Kansas, to a volatile sector north of Saigon in III Corps' Tactical Zone amidst skepticism over the effectiveness of heavy armor for stability operations in jungle terrain. When Pentagon officials grudgingly allowed it to bring 27 M48A3 Patton tanks, General William Westmoreland, commander of US Military Assistance Command, Vietnam, impounded the vehicles at Phu Loi after criticizing that "Vietnam is no place for either tank or mechanized infantry units."[43] The cavalrymen thus relied on Armored Cavalry Assault Vehicles (ACAV)—moderately protected M113s personal carriers with upgraded firepower and turret gun-shields—for the first six months. During that time the division usually dispersed the squadron's three ground troops and air troop to support infantry units.

Armored cavalry proved its value in the 1st Infantry Division's first major engagement of the conflict on November 10 and 11, 1965. A Troop, then supporting the 2nd Battalion, 2nd Infantry Regiment, provided vital mobility and firepower as the task force defended National Highway 13, the main line of communication north of Saigon, against a sudden Viet Cong attack. Called the Battle of Ap Bau Bang for a small hamlet nearby, the cavalrymen broke the 272th Regiment's surprise assault with a mounted counterattack that allowed time for the American infantry to ready defenses. This fight, and

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[43] Starry, *Mounted Combat*, 56.

numerous others that followed, rapidly changed the Army's perception of the utility of armored cavalry in Vietnam. The troop received the Valorous Unit Award for its actions.[44]

The squadron continued to conduct search and destroy missions, cordon villages during larger clearing operations, and secure key routes and convoys throughout the spring of 1966. By summer it had reconsolidated its troops and repossessed its tanks as the division launched Operation El Paso II to secure a contested area called War Zone C northwest of Saigon. Since 1-4 CAV boasted greater road mobility than the infantry battalions, it focused on clearing critical routes with "roadrunner" reconnaissance-in-force patrols. This assignment resulted in a series of engagements where usually independent troops fought through Viet Cong ambushes while coordinating joint fires. The squadron's tanks, though not immune to mines and artillery, allowed the typically outnumbered cavalrymen to react, seize initiative, and disperse the unpredictable foe.[45]

Quarterhorse's success that summer inspired its new division commander, Major General William DePuy, to employ them to bait the elusive enemy into a decisive ambush. When Task Force Dragoon, comprising troops B, C, and an attached infantry company accordingly traveled down Highway 13 on July 9, the 272 Regiment launched a viscous artillery barrage followed by massed infantry assaults near the small town of Srok Dong. Despite suffering twelve killed and fifty-five wounded, 1-4 CAV maintained a stubborn defense while the Big Red One's 1st Brigade counterattacked and defeated the enemy. The squadron's Presidential Unit Citation attested that it achieved "712 confirmed hostile dead, an estimated 850 additional killed, and large quantiles of captured weapons and equipment."[46]

Throughout the Vietnam War division-level cavalry was not the only mounted security forces proving their tactical value. The 11th ACR, 1-4 CAV's corps-level equivalent, likewise demonstrated the

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[44] Wheeler, *The Big Red One*, 421-422.

[45] Ibid., 437-439.

[46] Annex A "Battle of Srok Dong Narrative," Combat After Action Report: Operation EL PASO II/III, 1st Infantry Division, 30 June 1966; *Fourth United States Cavalry*, ix.

potency of independent mechanized firepower during security operations. Starry, who commanded the

unit late in the war, believed the ACR devised "better means of gathering intelligence" and had "a higher

density of automatic weapons, possessed long-range radios, and had more aircraft than a mechanized

brigade."[47] From 1966 to 1971 the Blackhorse Regiment thus provided a mobile force that MACV

repeatedly used for large-scale clearing operations. It also spearheaded the allied incursion into Cambodia

in 1970, which occurred as the largest armored operation of the war.[48]

Figure 8. III Corps Area of Operations, Vietnam. Wikipedia Commons, accessed on April 6, 2017, https://commons.wikimedia.org/wiki/File:III_Corps_Tactical_Zone_December_1966.png.

The year 1967 found 1-4 CAV again conducting traditional cavalry tasks in support of III Corps'

efforts in War Zone C. Beginning with Operation Cedar Falls, which lasted from January 8 to 26, the 1st

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[47] Starry, *Mounted Combat*, 73.

[48] McGrath, *Scouts Out*, 158.

and 25th Infantry Divisions, 11th ACR, 196th and 173rd infantry brigades, and South Vietnamese allies cleared the 9th Division (VC) from the "Iron Triangle" with echeloned search and destroy attacks. The squadron initially screened the corps' eastern flank along Highway 13, then transitioned to blocking key enemy routes, and finally cleared targeted sites. Though they reportedly killed thirty-seven enemy and captured another 96, their protection of lines of communication with Saigon proved most significant.[49]

Quarterhorse next participated in Operation Junction City, again in War Zone C, from February to May of 1967. The plan called for the Big Red One and several attached brigades to create a "horseshoe" around the enemy stronghold while the 25th Division and 11th Armored Cavalry attacked into its center. Returning to its previous site of operations, 1-4 CAV led its parent division into position, seized landing zones for infantry battalion insertion, escorted support units, secured contested routes, and cleared enemy positions. Later in May, the squadron conducted similar actions during Operation Dallas in the same area where, as ordered, it conducted "combat reconnaissance" to destroy "VC/NVA forces and installations."[50]

These attacks occurred as the largest American operations in Vietnam thus far. Throughout the escalation Quarterhorse provided critical time and space for higher commands to clear Viet Cong concentrations. The scouts' efforts in controlling Highway 13, in particular, ensured division and corps logistical continuity. In March of 1967, after observing 1-4 CAV and others during Operations Cedar Falls and Junction City, MACV reported that "armored cavalry squadrons" had "proven responsive" for "aggressive action in RVN because of their balanced combined arms structure and inherent capability for quick response and independent action."[51] Despite this validation, 1-4 CAV frequently lost direct control of its air troop, which limited its potential for service as an economy-of-force asset.

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[49] Combat After Action Report: Operation CEDAR FALLS, 1st Infantry Division, 13 March 1967, 153-154; *Fourth United States Cavalry*, 29.

[50] Operations Report: Lessons Learned, Headquarters, 1st Infantry Division, 9 November 1967, 6-7; quoted in Robert Peters, "Jack of all trades: the metamorphosis of armored cavalry in Vietnam," masters thesis, University of Louisville, Louisville, 2005, 71.

[51] Report: "Mechanized and Armor Combat Operations in Vietnam," Headquarters, United States Army Vietnam, 28 March 1967, 70.

Allied forces across South Vietnam began 1968 by repelling the Tet Offensive. Due to their unique ability to rapidly reposition with survivable lethality, division commanders relied on their prized armored cavalries to rapidly reinforce weakening defenses and assault enemy concentrations. Quarterhorse, as the Big Red One's most agile mechanized force near Saigon, sent its A Troop to reinforce a task force defending the Tan San Nhut airfield while B and C Troops supported the 2nd Battalion, 28th Infantry Regiment, in a hard fight with four enemy battalions over control of the town of An My. The troopers engaged in among the fiercest fighting of the war as they unleashed heavy firepower against lighter Viet Cong forces.[52]

The squadron, along with attached infantry units, fought another intense engagement several weeks later at Tan Hiep, near Di An, against an attacking enemy battalion. On the 5th and 6th of May it then supported a division effort to defeat retreating Viet Cong forces northeast of Di An by first blocking, and then pursuing and defeating, a retreating contingent. Troops A and B saw extremely heavy fighting during the final assault. The troopers reportedly killed approximately 340 enemy over the two-day fight.[53] Throughout the remainder of 1968 they executed continuous security operations as MACV placed greater emphasis on stabilizing civilian areas and empowering the Army of South Vietnam.

Armored cavalry remained high-use offensive assets as less mobile infantry units increasingly focused on "Vietnamization" of the war effort. On March 30, 1969, Quarterhorse accordingly joined a multi-division clearing operation called Atlas Wedge in the Michelin plantation fields 70 kilometers northwest of Saigon. Ordered to "detect, fix, and destroy VC/NVA forces in the area," the Big Red One relied on 1-4 CAV, and participating 11th ACR elements, to accomplish the task.[54] Lieutenant Colonel William Haponski, then commanding the squadron, assessed that their subsequent victories over the 7th

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[52] Wheeler, *The Big Red One*, 486-488.

[53] Ibid., 494-495; *Fourth United States Cavalry*, 30.

[54] Combat After Action Interview Report: Operation ATLAS WEDGE, 17th Military History Detachment, 1st Infantry Division, 19 April 1969, 4, 9.

NVA Division revealed that his unit, when task organized as a combined arms force with an additional cavalry troop and infantry company, fought as the "most powerful combat force in the division" against "large main force units."[55]

Even as mechanized cavalry supported ground infantry divisions, their helo-centric counterparts enabled air mobile divisions with expanded, if less forceful, reconnaissance and surveillance. As an example, the "Headhunters" of 1st Squadron, 9th Cavalry Regiment, supported the 1st Cavalry Division with three aerial troops and a light ground troop throughout the war. The aero cavalrymen's swift and far reaching scouting abilities complimented their higher command's use of massed rotary wing transport to allow infantry to rapidly close with and engage elusive Viet Cong forces in restrictive terrain. At famed places like the Ia Drang Valley, 1-9 CAV repeatedly allowed the "First Team" to seize initiative and position for advantage.[56]

In February of 1970, with the US Army's withdrawal from Vietnam underway, 1-4 CAV assumed rearguard duty—an economy-of-force mission traditionally assigned to cavalry—as the 1st Infantry Division redeployed to Fort Riley and Germany. Starry later described in his detailed study how, ironically, the armored forces who were late to concentrate in Indochina would remain to "anchor the withdrawal of American combat units."[57] Unfortunately for the squadron, they suffered the last Big Red One soldier killed in action in Vietnam when an A Troop NCO walked over a mine. With their wartime service complete, the headquarters, B, C, and D Troops returned to Kansas while A Troop joined the division's 3rd Brigade "Forward" in Europe.

Quarterhorse's experiences in the Vietnam War yielded insights concerning cavalry in security operations. Frederick Brown, the last 1-4 CAV commander in Indochina and a future Commandant of the Armor Center, later attested that "through demonstration of ground and air firepower, mobility and shock

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[55] Haponski, *Danger's Dragoons*, 197.

[56] McGrath, *Scouts Out*, 159.

[57] Starry, *Mounted Combat*, 164.

action, combined with expert, flexible commanders 'fighting forward' at every level, the Fourth US

Cavalry…dominated ground combat."[58] While seemingly boastful, the future general's suggestion of

relative overmatch at places like Ap Bau Bang, Highway 13, and Michelin Plantations indicate that

cavalry-centric task forces, when empowered with mission-specific capabilities, offer potential to

decisively expand a division's tactical options through distributed security contributions. These lessons,

though distinct to that conflict, remain relevant to future US Army campaigns.

Reconnaissance Operations Case Study:

1-4 CAV in the Persian Gulf

Reconnaissance operations, like security efforts, are central to shaping favorable conditions for

division maneuver during offensive, defensive, stability, and even civil assistance, operations. As defined

by Army division doctrine, they are missions "undertaken to obtain, by visual observation or other

detection methods, information about the activities and resources of an enemy." While adversaries often

demand the most attention—especially during forcible entry in expeditionary theaters—a variety of

manned and unmanned sensors also collect "data concerning the meteorological, hydrographic, or

geographic characteristics of a particular area."[59] Similar to security efforts designed to protect main force

units, cavalry has specialized in pro-active information collection and reporting since antiquity.

Divisions doctrinally execute four types of reconnaissance designed to orient "on the enemy,

terrain, infrastructure, and society to collect information" that is then "turned into intelligence products

that influence the conduct of current and future operations."[60] These tasks include conducting zone

reconnaissance across a linear area with defined boundaries, area reconnaissance around a specific

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[58] Haponski, *Danger's Dragoons*, 113, 197.

[59] ATP 3-91, 8-1.

[60] Ibid.

location, route reconnaissance along roads and highways, and reconnaissance-in-force to test enemy strengths and dispositions. Cavalry formations, depending on the habitual or *ad hoc* force mix of armored, wheeled, dismounted, and aerial platforms, also execute counter-reconnaissance against enemy scouts to deprive opposing commanders of battlefield clarity.[61]

The campaign histories of the 1st Squadron, 4th Cavalry Regiment, again include a germane case study for assessing direct-reporting scouts in support of division maneuver. As the primary ground reconnaissance element of the 1st Infantry Division during the First Persian Gulf War in 1991, it executed a variety of information collection tasks, counter-reconnaissance actions, and even attacks to seize critical objectives as they enabled the Big Red One, and ultimately the Army's VII Corps, to defeat entrenched Iraqi armored forces in the southern deserts of Mesopotamia. According to the squadron's Meritorious Unit Award citation, it "destroyed 65 tanks, 66 Armored Personnel Carriers, 66 trucks, 91 bunkers, and captured 3,010 enemy soldiers" during the brief campaign to liberate Kuwait.[62]

Quarterhorse received notification that it would deploy to Southwest Asia from its home-station at Fort Riley, Kansas, while operating under the ROAD J-Series design. Organically allocated two ground troops with M3A2 CFVs and two air cavalry troops with a mix of OH-58 Kiowa scout and AH-1 Cobra attack helicopters, the formation specialized in moderately contested reconnaissance. Major General Thomas Rhame, the Big Red One commander, appreciated the armored profile of the Iraqi Army and accordingly allocated the squadron nine M1A1 Abrams tanks drawn from theater depots to provide capability to execute more forceful scouting. The squadron commander also reorganized a third air troop from assigned rotary wing assets. Upon drawing vehicles in Saudi Arabia, A and B Troops reconfigured with a mix of mechanized scouts and heavy tanks.[63]

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[61] ADRP 3-90, 5-2.

[62] 1st Squadron, 4th Cavalry Regiment, Meritorious Unit Award Citation, Operations Desert Shield and Desert Storm: Valorous Unit Award Citations, Center of Military History, United States Army.

[63] Bourque and Burdan, *The Road to Safwan*, 22-23.

The squadron task force's first duty was to screen to protect the massing of the 1st Infantry Division at Logbase Echo, and then Assembly Area Junction City, along the northern border of Saudi Arabia near a town named Hafr Al Batin. Throughout January and February, B Troop, and then C and D Troops, patrolled north of the division while A Troop lagged in drawing vehicles. During this time the squadron's pilots destroyed an enemy reconnaissance vehicle and its ground scouts captured several Iraqi soldiers, again proving the value of combining integrated air-ground teams. The squadron's tanks, which were then untested against Soviet-grade armor, provided overwatch along the screen line.[64]
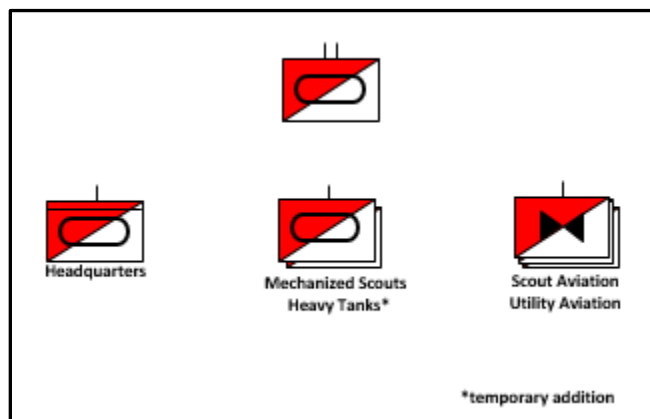

Figure 9. 1-4 CAV, First Persian Gulf War. Stephen Bourque and John Burdan, *The Road to Safwan: The 1st Squadron, 4th Cavalry in the 1991 Persian Gulf War* (Denton: University of North Texas Press, 2007), 22-23.

On February 24, with the Big Red One as its main effort, VII Corps began its attack north to envelop Iraq's Republican Guard Corps—then considered to be its strongest armored force—in defensive positions west and north of Kuwait. Quarterhorse initially moved under control of the division's 1st Brigade and subsequently followed the armor and mechanized infantry battalions through marked breach lanes. After crossing, the squadron separated to conduct a forward reconnaissance and mobile screen along the division main body's northern flank as it advanced. Now reporting directly to Rhame, the

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[64] Wilson, "Tanks in the Division Cavalry Squadron," 8; After Action Report: Operation DESERT STORM, 1st Infantry Division, 20 June 1991, 3-4.

cavalrymen destroyed three anti-tank guns, two armored scout trucks, four truck carriers, and captured 145 prisoners as they maneuvered east.[65]

The squadron made contact with rear elements of the 2nd ACR on the 26th in order to coordinate a passage of lines for its parent command. The regiment had conducted an advance guard as it led VII Corps's sweeping eastward advance. While the 1st Infantry Division was consolidating to the southwest, the ACR had located the Tawakalna Division and destroyed its 50th and 18th Brigades. According to Stephen Bourque, who served in the 1st Infantry Division's headquarters during the war, the opposing Iraqi forces "found no respite from constant ground, artillery, and air attacks" as the "Dragoons" prepared to "pass the attack to the Big Red One." Far to the north, the 3rd ACR likewise led XVIII Corp's attack along the coalition's left axis.[66]

Throughout the night the brigades of the 1st Infantry Division transitioned through the 2nd ACR's positions. Four hours into the passage of lines—considered a high risk operation due to potential for fratricide—the squadron emerged and launched another moving screen along their division's northern boundary with the 1st Armored Division. By advancing parallel to the main body the cavalry allowed Rhame to preserve his infantry and armor battalions for the impending fight. During its movement, Quarterhorse located and destroyed an isolated tank platoon, and then, upon discovering an Iraqi logistical base guarded by a company of armor, infantry, and artillery, conducted a rapid attack that left dozens of burning vehicles in its wake.[67]

Thus far in the offensive 1-4 CAV had performed traditional—and doctrinal—tasks in support of large-scale maneuver. By screening to protect the initial massing of friendly forces, coordinating with corps cavalry to allow unscathed passage to the main battle zone, and reconnoitering their higher

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[65] 1-4 CAV Operations Staff, "Riders on the Storm: A Narrative History of the 1-4 Cav's Campaign in Iraq and Kuwait—24 January-March 1991," *Armor* (May-June, 1991): 13; Bourque, *Jayhawk*, 223, 225.

[66] Bourque, *Jayhawk*, 327-331; Enclosure 3, Part 1, After Action Report: Operation DESERT SHIELD/DESERT STORM, VII Corps, 20 June 1991, 9.

[67] Bourque and Burdan, *The Road to Safwan*, 140, 153, 155-157.

command's exposed northern flank during the subsequent advance, it had employed expanded combined arms capabilities to shape favorable conditions. This success was, in large part, facilitated by integrating heavy armor into reconnaissance teams with supporting attack aviation. Lieutenant Colonel Robert Wilson, the squadron commander during the campaign, later wrote that his tanks "were indispensable in accomplishing the mission" and that having them "in the squadron gave the division commander more options and greater flexibility."[68]
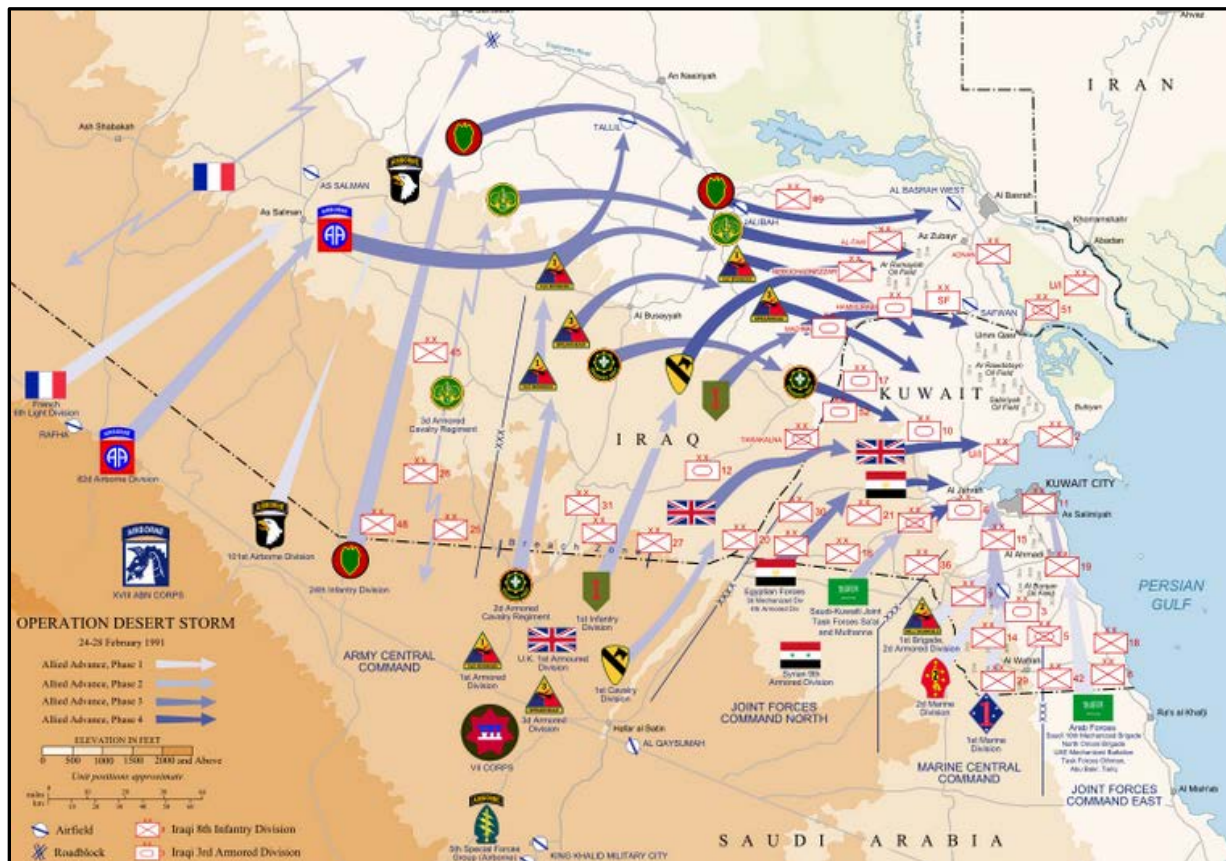

Figure 10. Operation Desert Storm. Wikipedia Commons, accessed April 6, 2017, https://en.wikipedia. org/wiki/Gulf_War.

On the morning of the 27th, after a tactical pause, the Big Red One resumed movement towards the Republican Guard. Quarterhorse continued its flank screen with aero scouts conducting

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[68] Wilson, "Tanks in the Division Cavalry Squadron," 9, 11.

reconnaissance ahead, ground scouts traveling along the projected screen line, and tanks moving to the inside as quick response forces. The squadron, and A Troop in particular, destroyed twenty-six enemy tanks and twenty-five personnel carriers during the advance, though many appeared abandoned. The division, after pausing again in the afternoon to coordinate with VII Corps, resumed its drive to cut off the retreating Iraqi Army by blocking the Basra Highway which led north into Iraq. Rhame then ordered 1-4 CAV to protect his northern flank with a defensive position astride the highway while his 2nd Brigade blocked farther south.[69]

Quarterhorse, with its air scouts far to the front, conducted a hasty reconnaissance-in-force to seize their assigned blocking positions. However, when they lost all communications with the division it became apparent they had moved too far east and separated from 2nd Brigade. The error, originating from confusion in the division headquarters, left them exposed and beyond friendly support range as the easternmost element of VII Corps. That afternoon the squadron destroyed several retreating Iraqi tanks and soon encountered thousands of Iraqi soldiers straggling north towards the international border. As darkness fell, Wilson ordered his troops into a defensive coil to wait out the night. By morning they reestablished contact with 2nd Brigade and had taken over 2000 prisoners.[70]

Similar to the Vietnam War, Operation Desert Storm featured a variety of divisional cavalries with varying compositions. The XVIII Corps, as the allies' most diverse corps, benefited from three squadrons that each organized differently. While the 1st Squadron, 17th Cavalry Regiment, supported the 82nd Airborne Division with one HMMWV-mounted troop and three air troops, the 2nd Squadron, 4th Cavalry Regiment, supported the 24th Infantry Division (Mechanized) with one CFV troop, two tank and CFV mixed troops, and two air troops. The 2nd Squadron, 17th Cavalry Regiment, enabled the fast

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[69] Bourque, *Jayhawk*, 374-374.

[70] Bourque and Burdan, *The Road to Safwan*, 167, 170-172, 177-179; After Action Report: Operation DESERT STORM, 1st Infantry Division, June 20, 1991, 5.

moving 101st Airborne Division with a purely aerial squadron. This variance in mobility profiles allowed

each cavalry force to support its parent division according to specific informational requirements.[71]

On March 1 Quarterhorse conducted one of the coalition's final tactical actions of the war when it

seized the Safwan airfield in Iraq to serve as the site of peace negotiations. The VII Corps commander,

Lieutenant General Frederick Franks, ordered Rhame, as remembered by 1-4 CAV's operations officer, to

"reconnoiter the area" around the airbase "but avoid becoming decisively engaged."[72] Now supported by

an AH-64 Apache company from the 11th Aviation Brigade, 1-4 CAV accordingly moved across the

border to find elements of the Hammurabi Division on site. The Iraqis departed after a tense standoff and

allowed the Americans to occupy the airbase. While no fighting occurred, the air troop conducted a useful

area reconnaissance of the Iraqi positions that allowed Wilson to position his ground troops in a credible,

yet not overly threatening, posture.[73]

Quarterhorse completed their wartime service by moving 100 kilometers west to establish traffic

control points along the post-war demarcation line. The squadron processed thousands of refugees and

paroled prisoners as displaced Iraqis civilians and soldiers struggled to return home. This final act

included providing medical care to several hundred children, women, and men who had suffered injuries

during the conflict. On 15 April 1991, the command finally collapsed its operations and moved south to

turn in vehicles at theater depots and begin redeployment to Kansas.[74]

The reconnaissance and security actions of 1-4 CAV in the First Gulf War, even when

considering Iraqi deficiencies, demonstrated the potency of cavalry teams when empowered with cross-

domain capability. Wilson wrote in *Armor* of the confrontation at Safwan that, "tanks were indispensable

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[71] McGrath, *Scouts Out*, 174.

[72] Quoted in Bourque, *Jayhawk*, 400.

[73] 1-4 Operations Staff, "Riders on the Storm," 19-20; After Action Report: Operation DESERT STORM, 1st Infantry Division, 20 June 1991, 6.

[74] Bourque and Burdan, *The Road to Safwan*, 221-223; After Action Report: Operation DESERT SHIELD/DESERT STORM, VII Corps, 20 June 1991, 12-14.

in this operation, not only for their killing power but as a deterrence to a would-be attacker against an isolated force." The future lieutenant general likewise attested of the entire campaign that, "the air/ground cavalry mix was very effective, and enabled the squadron to move rapidly and cover a large area of operations."[75] These successes, stemming from Quarterhorse's unique tactical versatility, allowed it to enable their division throughout the vast envelopment operation.

Opinions like Wilson's quickly moved beyond participatory commentary and into institutional consensus. In the Armor Center's official review of Operation Desert Storm, its commanding general, Thomas Foley, wrote that "adding tanks enabled a faster reconnaissance tempo and added depth to the security mission." He also complained that just "two ground troops were insufficient to accomplish normal missions."[76] Two years later, even as it downsized, the Army established robust L-Series squadrons that included three ground troops containing Abrams and CFV platoons along with two air troops with Apaches and Kiowa scouts. After decades of vacillation over whether division cavalry should optimize for stealthy or forceful reconnaissance, it had once again chosen maximal capability.[77]

Division Cavalry Proposals

Looking towards future combat operations, the US Army can potentially incorporate insights from its recent past to design viable options to bridge structural gaps in reconnaissance and security capabilities at the division level. As illustrated by the sixty year evolution of American cavalry in general, and the performance of units like the 1st Squadron, 4th Cavalry Regiment, in particular, two-star headquarters greatly benefited from direct-reporting formations optimized to collect information and defeat enemy scouts in a variety of combat operations. While these squadrons often excelled at shaping

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[75] Wilson, "Tanks in the Division Cavalry Squadron," 11.

[76] Report, "Desert Shield and Desert Storm Emerging Observations," The United States Army Armor Center, 7 October 1991, 4-5.

[77] McGrath, *Scouts Out*, 166.

conditions during forcible entry, they likewise proved their value, sometimes counterintuitively, during distributed and asymmetric stability efforts.

This historical record yields two foundational insights, among others, that may inform the creation of future division-level cavalry. The first emerges from the enduring debate over stealthy or forceful optimization in order to achieve high-end capability relative to threat capabilities. In both the Vietnam War and the First Gulf War, in addition to the Second World War, the Korean War, and the 2003 invasion of Iraq, general officers—regardless of pre-conflict expectations for narrow utility—ordered their cavalry to conduct a wide variety of combat actions that required enhanced mobility, protection, and firepower. As the Armor Center assessed after Operation Desert Storm, "scouts must be in a hardened vehicle that must be able to move over all types of terrain, shoot and destroy chance contacts, and move through minefields and artillery fire."[78]

The requirement to equip and arm for tactical overmatch during reconnaissance and security operations holds unique implications for the types of cavalry teams that divisions could potentially task organize to create advantageous conditions and exploit windows of opportunity. Since Army cavalries are now both constrained and empowered by particular armored, stryker, and infantry brigade profiles, they each own variations of material advantages and limitations that would inform higher echelon contributions. Similar to the tactical bifurcation of reconnaissance units that served under armored and infantry divisions during the Second World War, the current diversity of heavy, medium and light scouts allows commanders to create tailored instruments to combat specific threats.

Beginning with the HMMWV cavalry of the infantry BCTs, the Army maintains fifteen active component and twenty National Guard squadrons that perform dismounted, wheeled, airborne, and airmobile missions. If selected to directly support division or joint task force information collection, these scouts—which represent fifty-nine percent of the total ground cavalry force—would offer stealthier

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[78] "Desert Shield and Desert Storm," United States Armor Center, 4.

observation and greater strategic mobility.[79] However, as argued by a US Army Maneuver Center assessment in 2014, they often "lack the passenger carrying capacity, protection, and mobility required for R&S operations."[80] While IBCT troopers have been particularly useful during stability operations in places like Bosnia, Haiti, and Afghanistan due to their mobility and convenient logistics, they proved generally inadequate for intense combat in Korea, Vietnam, and both invasions of Iraq.[81]

Stryker BCTs, as the Army's newest type of maneuver brigade, field scouts with medium-weight platforms. With seven active component and two National Guard squadrons, they comprise just fifteen percent of the cavalry force.[82] Because stryker formations are, according to Army doctrine, "more deployable than the ABCT" and have "greater tactical mobility, protection, and firepower than the IBCT," they could provide divisions and joint task forces with a compromise option that possesses moderate capability to fight for information and provide freedom of maneuver.[83] Similar to the scouts which the Army predominantly relied upon in Europe during the Second World War, stryker squadrons, especially select units that have been "up-gunned" with 30mm auto-cannons, boast ability to defeat lighter enemy forces while defending, under ideal conditions, against adversary armor.[84]

The heavy cavalry of the Armored BCTs represent the Army's most capable ground reconnaissance and security formation in high intensity warfare. As illustrated by the combat record of 1-4 CAV in settings ranging from open deserts to restrictive jungles, mechanized squadrons provide

[79] Army Divisions, Force Management System Web Site, United States Force Management Support Agency.

[80] "Cavalry Squadron Capability Review," White Paper, US Army Maneuver Center of Excellence, 17 April 2014, 5.

[81] Cameron, *To Fight or Not to Fight*, 123, 460, 513; "Desert Shield and Desert Storm," United States Armor Center, 4.

[82] Divisions, Force Management System Web Site, United States Force Management Support Agency.

[83] Field Manual (FM) 3-96, *Brigade Combat Team* (Washington, DC: Government Printing Office, October 2015), 1-12.

[84] Sydney Freedberg, "Army To Upgun All Strykers: 30MM & Javelin," *Breaking Defense*, 29 February 2016.

divisions or joint task forces with ability to forcefully shape maneuver options with high tempo reconnaissance and durable security. While the immense weight of their armored platforms, high rates of fuel consumption, and large signatures make them less strategically mobile and more expensive, their CFVs and tanks possess unique potential to deter potential opponents through forward positioning. Armored scouts, representing nine active component and six National Guard squadrons, comprise approximately twenty-five percent of the larger cavalry force.[85]

The second insight from the Army's record of employing cavalry since mechanization centers on the importance of empowering scouts with cross-domain capabilities. While mounting them on appropriate vehicles with requisite mobility, protection and firepower has traditionally defined their maneuver parameters, augmenting squadrons with expanded surveillance, destructive fires, engineer mobility, and cyber-electronic warfare means can multiply capabilities. Rotary wing aviation, as an ideal instrument for extending a supported element's breadth of frontage and depth of reach, remains among the most important combat multipliers. The placement of attack helicopters in direct support or under operational control of ground cavalry is a primary factor that separates division and corps-level scouts from those that enable brigades with more narrowly defined tactical purposes.[86]

The crucial importance of pairing at least one aviation troop with a heavy DIVCAV, or more in the case of an airborne infantry division or dispersed joint task force, finds ready historical validation. While William Haponski, commander of 1-4 CAV in 1969, emphasized how the "close-in support" by air cavalry with "instant, accurate firepower" empowered his squadron during "extended action" in security efforts in Vietnam, the 1st Infantry Division's report from the First Gulf War likewise articulated how integrated rotary wing was "needed to effectively cover the sector normally associated with the division's frontage" during forced entry.[87] The uniting of aerial and ground scouts, which unsurprisingly share much

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[85] Divisions, Force Management System Web Site, United States Force Management Support Agency.

[86] "Cavalry Squadron Capabilities Review," Maneuver Center, 7; Barno, "The Future of the Army," 11.

[87] Haponski, *Danger's Dragoons*, 67-68; After Action Report: Operation DESERT STORM, 1st Infantry Division, 20 June 1991, 8.

of the same organizational culture and traditions, creates air-ground teams capable of conducting expanded screens or extended reconnaissance in zone.

If rotary wing troopers enhance a squadron's tactical breadth and depth, joint fires have traditionally provided scouts with out-sized ability to disrupt and destroy enemy forward elements. For cavalry to fully enable division maneuver, it requires support from responsive indirect fires—often with precision rockets at extreme ranges—to compensate for limited organic lethality. As Haponski again noted, his troopers in Vietnam "always" had a "specific artillery battery assigned in direct support to fire immediately in the event of contact." He also emphasized how joint and combined fires, swiftly delivered by Air Force, Navy, Marine, and allied attack aircraft, provided "immediate support" with "huge swaths of terrain erupting in a hell that cannot be imagined by anyone who has not seen it."[88] These kinds of echeloned fires remain particularly critical for enabling light scouts during high intensity combat.

Cavalry formations, when organized to support joint forces maneuver, can be empowered with additional enablers to better serve as agile combined arms teams. Fighting early and forward of the main body, they have historically incorporated air defense, engineers, chemical reconnaissance, high altitude surveillance, signals collection, human terrain specialists, civil affairs teams, forward air controllers, and additional operations staff with specialized expertise. As the Army continues to integrate emerging technologies, scouts will increasingly facilitate cyber, electronic warfare, space, human terrain, special operations, and informational efforts to shape operating environments across depth and dimension. Similar to the traditional pairing of air and ground scouts, cyber action teams, in particular, may increasingly find cavalry troops to be ideal partners for facilitating early access penetration.[89]

Each of the Army's types of ground squadrons—when empowered with tailored cross-domain capability according to maneuver profile and mission requirements—consequently offer flexible options

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[88] Haponski, *Danger's Dragoons*, 68-69.

[89] FM 3-98, 1-7, 1-9.

for divisions and joint forces to attain reconnaissance and security superiority. The structural diversity of the cavalry force, though currently overly represented by HMMWV troops, provides a panoply of customizable teams for dominating disruption zones during offensive, defensive, and stability operations. This means that leaders should select and design DIVCAV teams to achieve tactical overmatch relative to expected enemy capabilities, rather than preconceived platform biases. As argued in VII Corps' report following Operation Desert Storm, effective scouts need to be resourced to "fight for information" and "go in harm's way," regardless of intended stealthy observation.[90]

These insights can potentially inform future institutional efforts to bridge the current reconnaissance and security capability gaps at higher echelons. The Army could, in part, mitigate the issue by creating tailored cavalry task forces from assets typically controlled by divisions in both garrison and combat environments. Similar to the Excursion initiative that task organizes entire BCTs to temporarily serve as corps-level R&S Brigades, divisions or modestly-sized joint task forces can create combined arms teams from assigned aerial, fires, and maneuver elements to provide maximally equipped reconnaissance capability.[91] Rather than relying on brigades to "shape the deep fight" as an artificial layer between forward scouts and division commanders—as criticized in the 1st Armored Division's 2015 Warfighting Assessment—the flexible construction of separate cavalry task forces may allow more efficient information collection.[92]

The compositions of typical US Army divisions allow for myriad possibilities to create tailored reconnaissance and security teams. An initial and expedient option would be to detach a cavalry squadron from its parent BCT and provide it an attack aviation company in direct support. The addition of armed rotary wing capabilities would create, according to historical norms, the minimal air-ground capabilities required to execute more expansive information collection and counter-reconnaissance. In order to create

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[90] Enclosure, After Action Report: Operation DESERT SHIELD/DESERT STORM, VII Corps, 27 June 1991, Slides 5B-C.

[91] ATP 3-91, 1-9.

[92] Twitty to Milley, "1st Armored Division NIE/AWA Force Structure," 12 November 2015.

the operational reach, flexibility, and survivability to maneuver forward of the main body, the low

augmentation task force would also require direct support of air defense and indirect fires, a liaison

officer from the providing combat aviation brigade, and tailored logistical support.
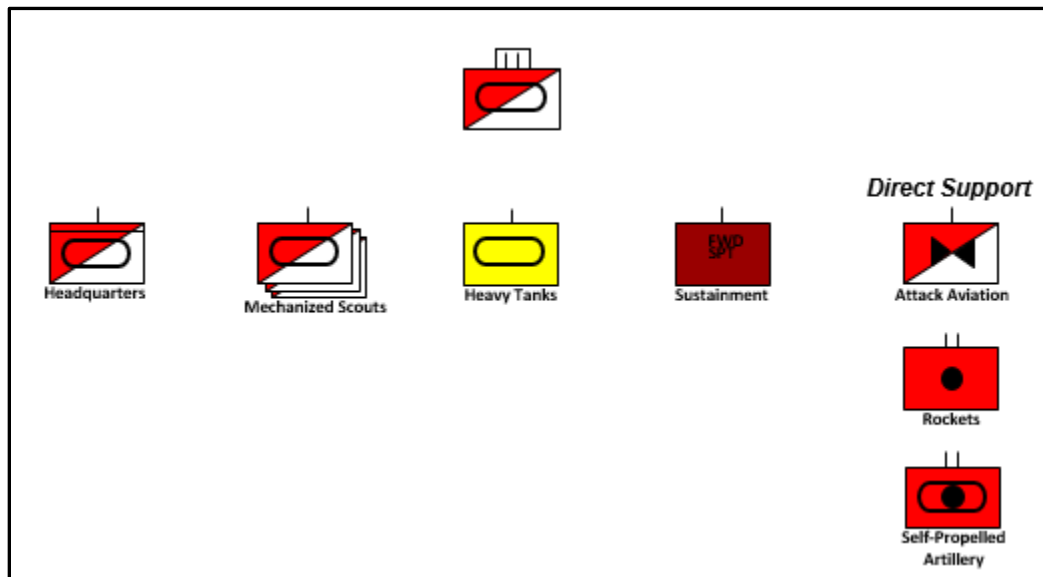

Figure 11. Division Cavalry Task Force (Armored): Low Augmentation. Author.

This battalion-sized task force would provide an economized method for divisions to recreate the

basic capabilities of the legacy ROAD H-Series squadrons that fought in Vietnam and defended Europe.

Depending on the task force's mechanized, motorized, or aerial profile, the air-ground team could execute

zone, route, and area reconnaissance or screen and guard operations with minimal preparation. This

configuration would potentially allow divisions to reconnoiter three major routes or maintain a contested

screening effort across 40 to 50 kilometer frontages.[93] However, the changes would leave the BCT that

provided the squadron with limited scouting capability while compelling aviation, fires, and sustainment

units to dedicate early resources to support the forward effort.

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[93] Field Manual (FM) 3-20.971, *Reconnaissance and Cavalry Troop* (Washington, DC: Government Printing Office, August 2009), 4-5; Field Manual (FM) 3-04.126, *Attack Reconnaissance Helicopter Operations* (Washington, DC: Government Printing Office, August 2009), 3-34.

A second option for creating a more robust division cavalry task force would be to build on the first template with expanded combat power and cross-domain fires. This medium-level augmentation could include operational control of an additional ground cavalry troop, an engineer platoon, a chemical platoon, and an intelligence collection and analysis section. To enable adequate tactical reach it would require support from air defense, extended logistical trains, long-range unmanned aerial surveillance (UAS), cannon or rocket battalions, an attack reconnaissance battalion (air), and potentially, dedicated cyber, electronic warfare, and information operations teams. It would likely require transfer of staff from providing aviation, artillery, and sustainment units to increase squadron mission command capacity.
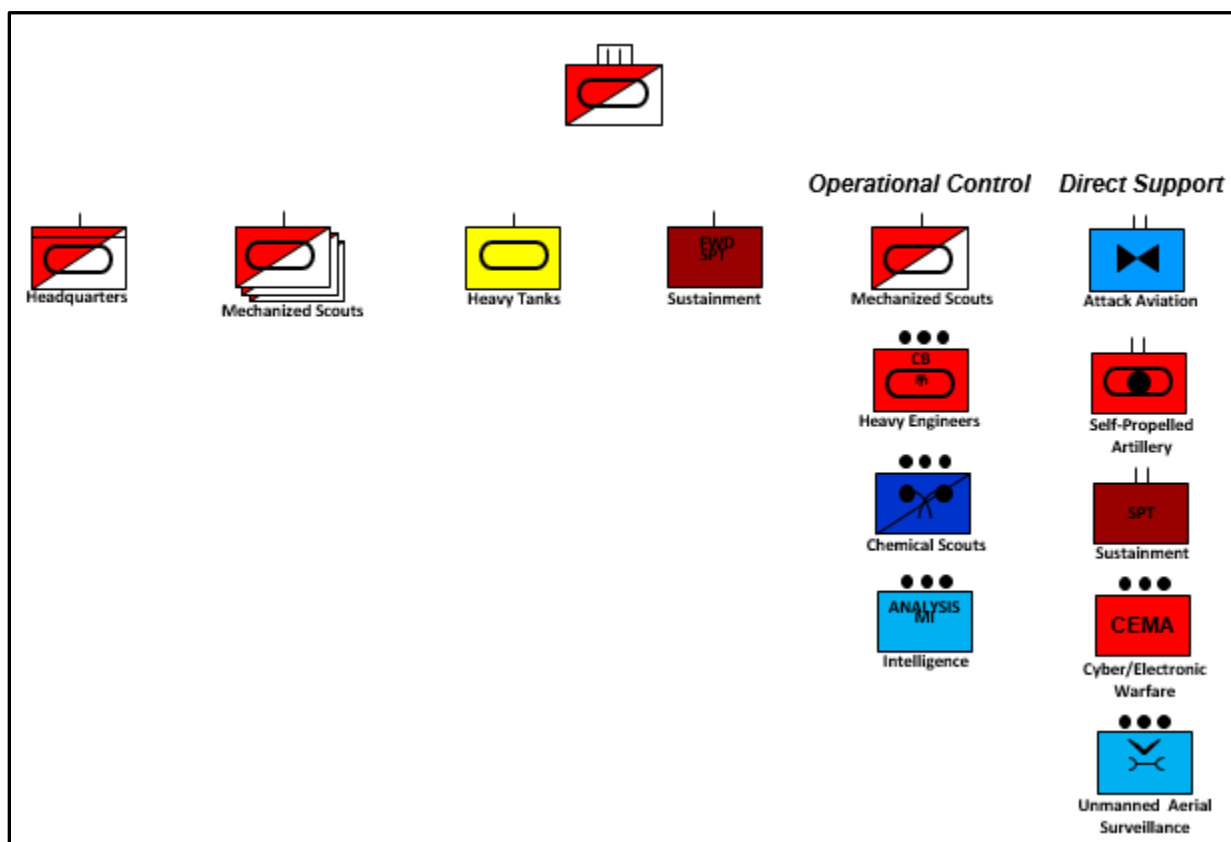

Figure 12. Division Cavalry Task Force (Armored): Medium Augmentation. Author.

This cavalry task force would likewise find recent historical relevancy. Building on the imposing L-Series model that led the 3rd Infantry Division's invasion of Iraq in 2003, it would field four ground cavalry troops, a tank or anti-armor company, and organic mortars. It could potentially reconnoiter five

major routes or guard approximately fifty to seventy kilometers of frontage.[94] An armor-centric version, in particular, would also be equipped to, as required by Army doctrine, conduct "aggressive" reconnaissance-in-force "to determine and exploit enemy weaknesses" while destroying enemy scouts.[95] Though it would stress a squadron's span of control, compel extensive combined arms training, and again require mitigation of the losing BCT's loss of scouting capacity, the concept would allow divisions to achieve early access into contested domains without prematurely committing entire brigades.

A third and more consequential option for enabling division or joint forces maneuver would be to create a larger and more powerful task force. In a marked departure from the current R&S Brigade program that provides modest augmentation to standard BCTs, this initiative would place three cavalry squadrons under a brigade headquarters while removing two of its maneuver battalions to other brigades. It would retain control of its organic artillery, engineer, sustainment, and remaining maneuver battalion. The team could further benefit from gaining operational control of an attack reconnaissance squadron (air), an air assault company (air), and two additional chemical platoons. It would also require support from a cyber action team, tactical air defense, long-range rocket fires, unmanned and high altitude surveillance, and a tailored forward logistics element from a sustainment brigade.

An alternate method for creating a brigade-sized reconnaissance team would be for a division to provide its combat aviation brigade operational control of a ground cavalry squadron. While this type of force would lack ACR-type ability to execute methodical reconnaissance and durable security actions, it would expand on the capabilities of the air-centric squadrons that once enabled airborne and airmobile divisions—exemplified by 1-9 CAV's missions in Vietnam—with responsive information collection across vast distances and restrictive terrain.[96] Though the brigade's ground scouts would benefit from

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[94] Ibid.

[95] FM 3-98, 1-7, 5-21.

[96] McGrath, *Scouts Out*, 159.

increased availability of AH 64 and UAS fires, they would, similar to any cavalry organization, still

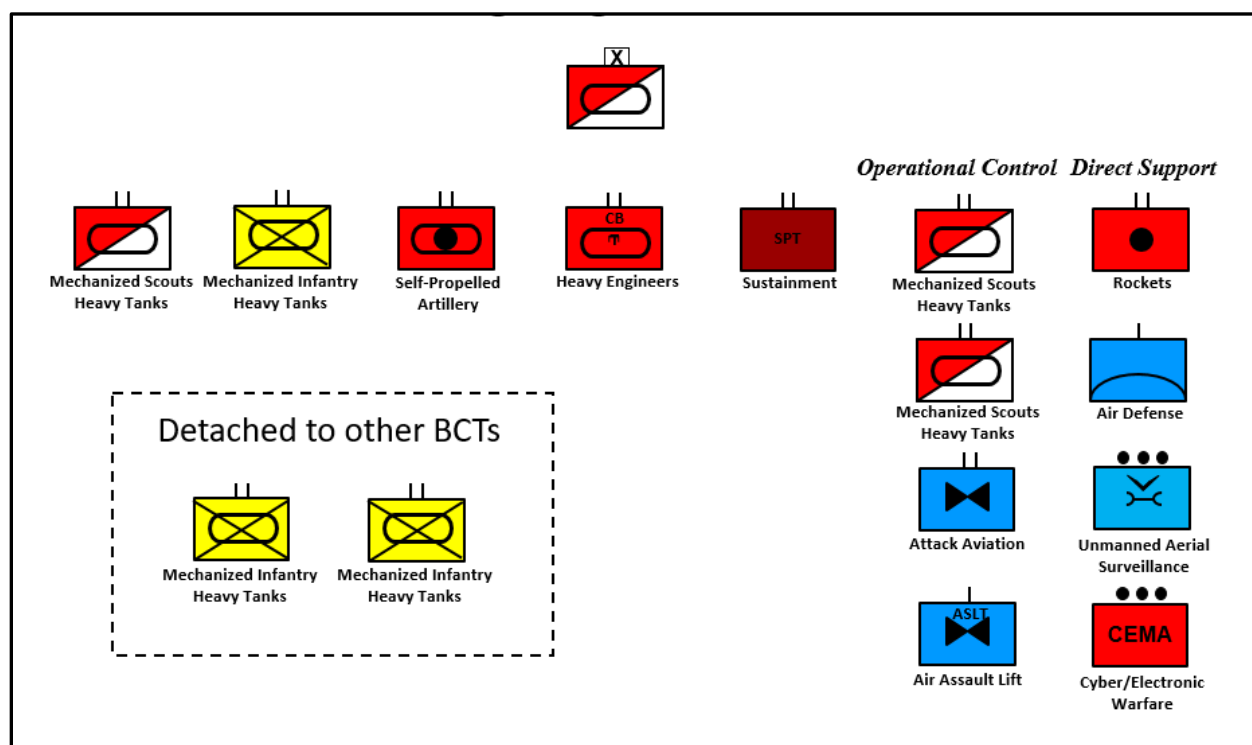require robust support by indirect fires, engineers, and modified logistical trains.

Figure 12. Division Cavalry Task Force (Armored BCT): High Augmentation. Author.

Task-organized cavalry brigades would replicate aspects of the capabilities demonstrated by the

11th ACR in Vietnam and the 2nd ACR in the First Gulf War. Depending on air-ground force mix, they

could potentially reconnoiter nine major routes or screen a front 120 to 150 kilometers wide. While the

teams would require substantial training, they could provide aggressive advance guard and cover

assignments while exploiting the effects of cyber, special operations forces, fast-moving attack aircraft,

and informational, cyber-electronic, and long-range fires to dominate counter-reconnaissance. As the 50th

Commandant of the US Armor School, Brigadier General John Kolasheski, noted of a 1st Infantry

Division exercise in 2016 that experimented with an air-ground brigade, it provided "critical reaction time

and maneuver space" for "exploiting success and seizing opportunities of our choosing."[97]

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[97] FM 3-98, 1-7, 5-21; quoted in Lee Robinson, "Advance Guard Fights for Information," *ARMY Magazine* (February 2017): 30-31.

Conclusion

Since the US Army adopted tactical modularity in 2004, reorganized its final deployable ACR as a Stryker BCT in 2011, and more recently restructured its BFSBs without cavalry squadrons, it has lacked dedicated and optimized ground formations to conduct forceful information collection above the brigade level. Though intended to produce greater combined arms versatility at lower tactical levels, modular transformation violated the long-held requirement, as argued by VII Corps after Operation Desert Storm, that ground forces require "armed and armored recce at every level…battalion through corps."[98] This capabilities gap has consequently impaired division and corps ability to execute informed and dynamic expeditionary operations across theaters featuring challenging area denial networks.[99]

This deficiency—which stemmed from episodic understanding of the potential for maneuver warfare between peer and hybrid states—can be remedied, in part, by extracting insights from the Army's long record of successfully employing cavalry forces. The Second World War, Korean War, Vietnam War, First Persian Gulf War, Afghanistan War, and Second Persian Gulf War each provided testing grounds for combinations of heavy, medium, light, and aerial squadrons as higher commands adapted pre-conflict organizations to the realities of complicated settings and adaptive foes. From the jungles of Indochina to the deserts of Mesopotamia, two lessons have emerged with certitude: division cavalry should optimize for high-end combat relative to threat capabilities, and it must be empowered with enablers to maintain demanding tempos across battlefields of expanded breadth and depth.[100]

While creating permanent squadrons at the two-star level would be an ideal solution to current needs, task organizing assets already under division control can provide mitigation that is internally

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[98] Enclosure, After Action Report: Operation DESERT SHIELD/DESERT STORM, VII Corps, 27 June 1991, Slide 3FX39.

[99] Amos Fox, "The State of the Cavalry: An Analysis of the U.S. Army's Reconnaissance and Security Capability," 16-1 *Land Power Essay: Institute of Land Warfare Publication*, Association of the United States Army, June 2016, 2-3.

[100] McGrath, *Scouts Out*, 105, 149, 152, 156, 164-166, 174-177.

resourced, tactically effective, and readily available. This could include empowering a detached squadron with attack aviation, creating modest task forces with maximal fires support, or forming entire cavalry brigades to, as prescribed by retired Lieutenant General David Barno in his report, "The Future of the Army," provide "division and corps commanders a scalable formation capable of screening and guard missions, as well as a myriad of long-range independent operations in support of other maneuver units."[101] Regardless of composition, tailored teams would offer options to capitalize on emerging cross-domain capabilities to answer higher echelon information requirements.

General Mark Milley, the 39th Chief of Staff of the Army, cautioned in the wake of America's large-scale ground campaigns in Iraq and Afghanistan, that "the level of uncertainty, the velocity of instability, and potential for significant inter-state conflict is higher than it is has been since the end of the Cold War."[102] Given this volatility, which is intensifying in regions such as the Middle East, Europe, and East Asia where air-ground cavalry teams proved their utility in past wars, divisions must prepare to fight for information as subordinate maneuver elements or as independent joint task forces. This imperative includes organizing to conduct forceful reconnaissance and security against a variety of near-peer, non-state, and hybrid adversaries. While division cavalry squadrons seemingly outlived their usefulness in 2004, the challenges of the future may demand their return as optimized task forces.

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[101] Barno, "Future of the Army," 11.

[102] Sydney Freedberg, "Gen. Milley to SASC: World Getting Worse, Army Getting Smaller," *Breaking Defense*, 21 July 2015.

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